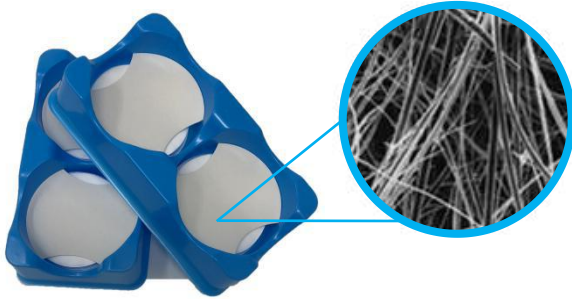


Quartz Disc Filters



Quartz fiber filters are made of very pure quartz fibers with no binders and glass fibers. The pure quartz composition prevents the filters from reacting with acidic gases, unlike glass fiber filters that can react and cause false readings. This makes quartz filters well suited for measuring heavy metal concentrations and small amounts of particles. Because of the low level of alkaline earth metals, ‘artifact’ products of sulfates and nitrates (from SO₂ and NO₂) are virtually eliminated. Quartz fiber filters are used for air sampling in acidic gases(except HF), stacks, flues, and aerosols, particularly at high temperatures and in PM-10 testing as well as where absolute purity of the filter medium is required. The filters also exhibit good weight and form stability.

Features Quartz

Binder-free

Biologically inert with the highest chemical and thermal resistance

Enables to pass through large volumes of air

Filters made of pure quartz microfiber (SiO₂), free of binding elements or additives

Heat treated for reduction of trace organics and superior chemical purity

High filtration efficiency

Higher resistance than glass microfiber. Very good up to 1000 °C

Applications Quartz

Applications that require a maximum filter purity with a low metal content and no carbon traces

High temperature and hot gas air monitoring applications

Pollution controls performed on the air in industrial stacks, smoke ducts, and aerosols

Sampling and analysis of PM-10 particles and other pollutants

Specification

Weight (g/m ²)	Thickness (µm)	Gas Collection Efficiency (%) at 2.2 µm	Binder	Maximum Operating Temperature (°C)	pH in Boiled Water Extract	Diameter (mm)
85	0.470	99.998	No	1000	6.5-7.5	25
85	0.470	99.998	No	1000	6.5-7.5	37
85	0.470	99.998	No	1000	6.5-7.5	47
85	0.470	99.998	No	1000	6.5-7.5	20,32 x 25,4 (8 x 10 in)

Quartz Disc Filters

Typical Levels of Trace Elements(PPM)

Al	Ba	Ca	Cd	Co	Cr	Cu	Fe	Mg	Mn	Na	Ni	Pb	Sr	Ti	V	Zn
300	10	250	0.002	< 0.5	2	2	50	25	2	100	2	<1	3	<1	<5	6

Table 7.1. Quartz Disc Filters Typical Levels of Trace Elements(PPM)

Part Number	Description
CTZ-QS025-100	Quartz microfiber, high purity 1000°C (SiO ₂), (25 mm) (100/pk)
CTZ-QS037-100	Quartz microfiber, high purity 1000°C (SiO ₂), (37 mm) (100/pk)
CTZ-QS047-100	Quartz microfiber, high purity 1000°C (SiO ₂), (47 mm) (100/pk)
CTZ-QS810-025	Quartz microfiber, high purity 1000°C (SiO ₂), (20,32x25,4mm)(8x10in) (25/pk)
CTZ-QS810-050	Quartz microfiber, high purity 1000°C (SiO ₂), (20,32x25,4mm)(8x10in) (50/pk)
CTZ-QS810-100	Quartz microfiber, high purity 1000°C (SiO ₂), (20,32x25,4mm)(8x10in) (100/pk)
CTZ-QH025-100	Quartz microfiber, high purity 1150°C (SiO ₂), (25 mm) (100/pk)
CTZ-QH037-100	Quartz microfiber, high purity 1150°C (SiO ₂), (37 mm) (100/pk)
CTZ-QH047-100	Quartz microfiber, high purity 1150°C (SiO ₂), (47 mm) (100/pk)
CTZ-QH810-025	Quartz microfiber, high purity 1150°C (SiO ₂), (20,32x25,4mm)(8x10in) (25/pk)
CTZ-QH810-050	Quartz microfiber, high purity 1150°C (SiO ₂), (20,32x25,4mm)(8x10in) (50/pk)
CTZ-QH810-100	Quartz microfiber, high purity 1150°C (SiO ₂), (20,32x25,4mm)(8x10in) (100/pk)

*QS:Standard Type ; QH: Heat Treated

Table 7.2. Quartz Disc Filters part numbers.